

Work Order ID 78643

January-12-12 7:50:43 AM

78643

Page 1

Item ID: D206-642-151

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Replacement Skidtube

Start Date: 12/01/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 26/01/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12/01/12 Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3804	A								
IIN-D206-642	O								

100

0.00

100

DOCUMENT CONTROL

DC


Memo

0.00

Document Control

Photocopy bluefile & type labels per PPP D206-642-151

CHG001

N/A 

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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NOTE: Date & initial all entries

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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
110	Skidtubes	0.00							
110									
Skidtubes	Memo	0.00							
Skidtubes	1-Deburr Fwd edge of tube								
	2- Remove ridge on inside of Fwd edge of tube as per Dwg D3804								
	3-Weld Fwd Cap as per Dwg D3804. Use aluminum rod. Grind D2647 to fit as required.								
	Pick:								
	Qty Part Number DescriptionBatch								
	A/R Aluminum Rod <u>M119712/M119785</u>								
	4-Grind weld flush to cap on top surface only.								
	5-Cut Aft end as per dwg D3804 from front of tube and Deburr								
	6-Remove inner indexing ridge on Aft end of skidtube as per Dwg D3804								
	7-Open holes for Aft end cap as per Dwg D3804 with #30 Drill Bit using DT8025.								
	8-Drill pilot holes using Dt8166 & DT8169D & DT9771.								
	9-Locate DT8732 from inner Aft saddle hole & 3rd crossbolt hole. Insert D3286-1 doubler using DT8732 & D206-642-241-T1, then locating doubler off of 3/16" holes, cleco DT8732 & doubler leaving DT8732 for added support.								
	10- Drill D3286-1 doubler rivet holes in tube using # 30 drill, spot drilling doubler at the same time.								

ESAD 12-01-12

DE 12-01-16

DC 12/01/17

DC 12/01/17

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11-Working from the center out, drill # 30 holes into D3286-1 doubler. Cleco each hole as it is being drilled. Verify angle of holes to accommodate rivet heads.

12-Remove 3/16" cleco's only and open GHW holes to Ø0.500" as per Dwg D3804

13-Remove D3286-1 doublers, identify orientation, deburr, then attach them to the workorder

14-Remove indexing edge using DT8741 as per Dwg D3804

15-C'sink GHW rivet holes as per Dwg D3804

16- Open Aft cap hole #6.
****no wearplate holes for this skidtube****

17-Deburr tube and blow out chips from inside the tube

120

QC6- Inspect dimensions to drawing

0.00

120

QC

Memo

0.00

Quality Control

*OK 12/01/17**5 12/01/17*

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

140 Chemical Conversion Coat per QSI005 4.1 0.00

140

HandFinish

Memo

0.00

Hand Finishing

DL 12/01/17

150 QC3- Inspect Part Finish 0.00

150

QC

Memo

0.00

Quality Control

NS 12-1-17

160 Skidtubes 0.00

160

Skidtubes

Memo

0.00

Skidtubes

1-Open holes to finished size as per Dwg D3804, (without cutting fluid)

2-C'sink crossbolt spacer holes as per Dwg D3804(without cutting fluid)

3-Deburr and blow out all chips from inside the tube

DL 12/01/17

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

170 QC6- Inspect dimensions to drawing 0.00

170

QC Memo 0.00

Quality Control

DP 12-1-17

180 0.00

180

Skidtubes Memo 0.00

Skidtubes

1-Locate, install and rivet doublers as per Dwg D3804. Micro-shave rivets as required

2-Bond D2654-1 web in place as per QSI 015. Ensure holes line up. Allow 12

Hrs. cure time before cutting

Start Date: 12/01/17 Time: 4:15

Finish Date: 12-01-18 Time: 11:00

Pick:

Qty Part Number Description Batch

A/RSikaflex-291 119508

Sikaflex expire date: 12/08/13

DC 12/01/17

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1

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Required Date: 26/01/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start ***NR1***

QC:

Date:

SPC (Y/N):

Date:

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

190

QC5- Inspect part completeness to step on W/O

0.00

190

QC

Memo

0.00

Quality Control

1 0 BE12-01-18

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

200

0.00

200

Skidtubes

Skidtubes

Memo

0.00

Skidtubes

1-remove alodine from around hole and prepare for welding

2-Prep per QSI 005 and Insert D2649 crossbolt spacers. Weld as per QSI 004 and Dwg D3804. Remember to back drill each hole to 0.25" before welding the other side. Use aluminum rod.

Pick:

QtyPart NumberDescriptionBatch
A/RAluminum Rod M119785

3-Grind welds flush as per Dwg D3804.

4-Using DT8733, insert (2) D3286-3 spacers as per QSI 004 and Dwg D3804. Remember to back drill each hole to 0.402" before welding other side. Use SS rod as required.

A/RSS Rod NONE BE 12-01-19

5-Counterbore 5/16" x 0.750" deep except 7th hole from Aft end as per Dwg D3804. Deburr

BE 12-01-18BE 12/01/19DP 12-1-24

W/O:		WORK ORDER CHANGES					
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1

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
210		0.00							
210	HandFinishing								
HandFinish	Memo	0.00							
Hand Finishing	Install D2680-041 Nut Plate as per Dwg D3804								
215		0.00							
215	QC9- Inspect visual per QSI004- Fusion Welds								
QC	Memo	0.00							
Quality Control									
220		0.00							
220	QC10- Inspect visual per QSI004- ground welds								
QC	Memo	0.00							
Quality Control									

① JB 12/01/19

12.01.24

12/6/125

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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N900040100

Setup Start

NS1

Revision ID:

Item Name: Replacement Skidtube

Stop

NS2

Start Date: 12/01/2012 Start Qty: 1.00

1

Cust Item ID:

Required Date: 26/01/2012 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

230

QC5- Inspect part completeness to step on W/O

0.00

230

QC

Memo

0.00

Quality Control

240

Pressure Wash per QSI005 4.3

0.00

240

HandFinish

Memo

0.00

Hand Finishing

1x0 M/L 12/01/25

250

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

250

Powdercoat

Memo

0.00

Powder Coating

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

*10:20
325 OF
10:50*

1x0 M/L 12/01/25

W119480

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Work Order ID 78643

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R11

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 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
260	QC3- Inspect Part Finish	0.00							
260									
QC	Memo	0.00							
Quality Control									
270		0.00							
270	HandFinishing								
HandFinish	Memo	0.00							
Hand Finishing	1-Install D2651-3 O-Rings on D2651-1 plugs with Petroleum Jelly and install plugs as per Dwg D3804. Clean excess adhesive.								

IRH / M 12/01/30

IRH / M 12/01/30

W/O:		WORK ORDER CHANGES					
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RH

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Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

280

0.00

280

HandFinish

HandFinishing

Memo

0.00

Hand Finishing

1-Install D2646 Aft Cap and seal with Sikaflex. Clean excess adhesive

✓ A/RSikaflex-291 11119508

Sikaflex expire date: 12/08

✓ 2- Install wearplate as per dwg

2-Wing Walk as per Dwg D3804 and QSI 005 4.4

✓ Batch: 11120125

1 RH 12/02/15

290

QC3- Inspect Part Finish

0.00

290

QC

Memo

0.00

Quality Control

826765

W/O:		WORK ORDER CHANGES					
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300 QC5- Inspect part completeness to step on W/O 0.00

300

QC

Memo

0.00

Quality Control

8/2/02/05

310 Packaging 0.00

310

Packaging

Memo

0.00

Packaging

Identify and pack for shipping as per PPP D206-642-151

Location: _____

PPP Rev: _____

PPP 76207

R 12/2/16 (1)

320 QC21- Final Inspection - Work Order Release 0.00

320

QC

Memo

0.00

Quality Control

M.L.J 12/02/17

R 12-02-14
G

W/O:		WORK ORDER CHANGES					
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Picklist Print

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Work Order ID: 78643

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Parent Item: D206-642-151

D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 12/01/2012

Required Date: 26/01/2012

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 10.12.08 PER IIN REV.N DD VERF:EC
REV:B 11.09.16 PER IIN REV.O DD VERF:EC

IPP

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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D2620

Manufactured No

110

Each

18.0000

1

1

D2620

Skidtube, 206 Skidtube

**

SAD 12-01-12

Location

Loc Qty

Loc Code

LG

18

71616

1

71617

6

75587

2

76815

1

76817

5

76819

3

D2647

Manufactured No

110

Each

158.0000

1

D2647

Cap

**

AE-12-01-16

Location

Loc Qty

Loc Code

LG002

158

73826

49

75482

109

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 12/01/2012

Required Date: 26/01/2012

Start Qty: 1.00

Required Qty: 1.00

CR3212-4-04

Purchased

No

180

Each

11,453.00

52

52

CR3212-4-04

Cherry Rivet

**

DL 12/01/17

Location

Loc Qty

Loc Code

ST331

1463

116471

78

117816

3

118686

1

118840

16

119017

1355

119075

10

st510

9990

119075

9990

(52)

D2654-1

Manufactured

No

180

Each

13.0000

1

1

D2654-1

Web

**

DL 12/01/17

Location

Loc Qty

Loc Code

LG

13

76756

5

76757

2

76758

6

D3286-1

Manufactured

No

180

Each

126.0000

2

2

D3286-1

Doubler

**

DL 12/01/17

Location

Loc Qty

Loc Code

LG002

128

74872

6

75484

4

ST046

-2

76772

116

(2)

January-12-12 7:50:47 AM

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Page 2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 3

Work Order ID: 78643

78643

Parent Item: D206-642-151

D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 12/01/2012

Required Date: 26/01/2012

Start Qty: 1.00

Required Qty: 1.00

D2649

Manufactured No

200

Each

580.0000

19

19

D2649

Cross Bolt Spacer

BE12-01-18

Location

Loc Qty

Loc Code

LG

400

77574

400

19

LG001

180

65317

1

68224

2

68507

11

71355

2

72704

2

72841

11

73390

8

73857

21

73858

53

73859

4

73860

4

76793

61

D3286-3

Manufactured No

200

Each

170.0000

2

2

D3286-3

Spacer

BE12-01-19

Location

Loc Qty

Loc Code

LG

100

78015

100

LG001

70

74117

1

76773

69

2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Page 4

Work Order ID: 78643

Parent Item: D206-642-151

Parent Item Name: Replacement Skidtube

78643

D206-642-151

Start Date: 12/01/2012

Required Date: 26/01/2012

Start Qty: 1.00

Required Qty: 1.00

D2680-041

Manufactured No

210

Each

135.0000

1

D2680-041

Nut Plate

**

1 12/01/19

Location

Loc Qty

Loc Code

ST013

39

75479

39

ST019

96

76790

96

CR3212-4-03

Purchased No

210

Each

1,706.000

2

CR3212-4-03

Cherry Rivet

**

2 12/01/19

Location

Loc Qty

Loc Code

FP002

716

114859

716

ST331

990

110139

2

119017

988

AN960JD416

NAS1149D0463J

Purchased No

210

Each

0.0000

1

AN960JD416

Washer

**

1118384 (1) 12/01/30

CCR264SS3-3

Purchased No

210

Each

937.0000

2

CCR264SS3-3

Cherry Rivet

**

2 12/01/19

Location

Loc Qty

Loc Code

ST331

937

113973

2

117849

139

119017

796

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries.

Picklist Print

January-12-12 7:50:47 AM

Page 5

Work Order ID: 78643

78643

Parent Item: D206-642-151

D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 12/01/2012

Required Date: 26/01/2012

Start Qty: 1.00

Required Qty: 1.00

MS27039-4-06

Purchased

No

210

Each

296.0000

1

1

MS27039-4-06

Screw

**

yl 12/01/30

Location

Loc Qty

Loc Code

ST292

296

119075

296

xl

D2651-1

Manufactured

No

270

Each

177.0000

6

6

D2651-1

Plug

**

1377 559 1x6 yl 12/01/30

Location

Loc Qty

Loc Code

FP001

177

57869

1

66445

10

69018

2

70839

2

71037

31

73827

131

D2651-3

Manufactured

No

270

Each

2,667.000

6

6

D2651-3

O-Ring

**

yl 12/01/30

Location

Loc Qty

Loc Code

FP001

667

61962

12

73828

655

xl

FP-A

2000

78126

2000

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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January-12-12 7:50:47 AM

Work Order ID: 78643

78643

Parent Item: D206-642-151

D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 12/01/2012

Required Date: 26/01/2012

Start Qty: 1.00

Required Qty: 1.00

D3873-1

Manufactured No

280

Each

775.0000

14

14

D3873-1

Bushing

**

u 12/01/30

LocationLoc QtyLoc Code

ST088

775

64760

1

68247

4

73829

19

73830

2

76792

249

78017

500

x14

D2646

Manufactured No

280

Each

119.0000

1

1

D2646

Aft Cap

**

u 12/01/30

LocationLoc QtyLoc Code

FP002

119

62678

5

68280

5

70945

1

71038

4

71070

2

73294

1

73825

101

x1

D3805-041

Manufactured No

280

Each

9.0000

1

1

D3805-041

Wearplate Assembly Fwd, Low Gear

**

B76778(x1) u 12/02/15

LocationLoc QtyLoc Code

FP001

9

75488

6

75489

3

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Page 6

Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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NOTE: Date & initial all entries

Picklist Print

Page 7

January-12-12 7:50:47 AM

Work Order ID: 78643

78643

Parent Item: D206-642-151

D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 12/01/2012

Required Date: 26/01/2012

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-08

Purchased

No

280

Each

1,037.000

2

2

MS27039-1-08

Screw

**

12/01/30

Location

Loc Qty

Loc Code

ST291

1037

117423

77

118910

86

119075

374

119109

500

x2

MS21042L3

Purchased

No

280

Each

6,081.000

7

7

MS21042L3

Nut

**

12/01/30

Location

Loc Qty

Loc Code

ST300

6081

117441

16

117885

32

118451

5

118927

3

119017

5551

119075

474

x7

D3805-045

Manufactured

No

280

Each

10.0000

1

1

D3805-045

Wearplate Assembly Aft, Low Gear

**

1376782 x1 12/01/30

Location

Loc Qty

Loc Code

FP001

10

73817

1

74896

1

76783

8

AN960JD10L

NAS1149D0332J

Purchased

No

280

Each

0.0000

2

2

AN960JD10L

Washer

**

11119042(x2) 12/01/30

January-12-12 7:50:47 AM

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Page 7

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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Picklist Print

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January-12-12 7:50:47 AM

Work Order ID: 78643

78643

Parent Item: D206-642-151

D206-642-151

Parent Item Name: Replacement Skidtube

Start Date: 12/01/2012

Required Date: 26/01/2012

Start Qty: 1.00

Required Qty: 1.00

AN3-37A Purchased No

280 Each

1,371.000

7

7

AN3-37A

**

Bolt

Location

Loc Qty

Loc Code

ST353

1371

117619

4

119086

1367

NAS1149D0363J

Purchased

No

280

Each

3,266.000

7

7

NAS1149D0363.J

**

Washer

Location

Loc Qty

Loc Code

ST298

3266

117601

61

118077

1

118612

18

118968

26

119537

1160

120142

2000

x 3

x 4

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

ITEM	Qty -041	Qty -043	Part Number	Description
1	X		D3804-041	SKIDTUBE ASSEMBLY, 206 A/B LOW
2		X	D3804-043	SKIDTUBE ASSEMBLY, 206 A/B HIGH
5	1	1	D2600-1-160	EXTRUSION
6	1	1	D2646	AFT CAP
7	1	1	D2647	CAP
8	19	20	D2649	CROSS BOLT SPACER
9	6	8	D2651-1	PLUG
10	6	8	D2651-3	O-RING
11		1	D2654-3	WEB
12	1		D2654-1	WEB
13	1	1	D2680-041	NUT PLATE
14	2	2	D3286-1	DOUBLER
15	2	2	D3286-3	STUD
21	2	2	AN960JD10L	WASHER
22	1	1	AN960JD416	WASHER
23	2	2	CCR264SS3-3	RIVET
24	2	2	CR3212-4-03	RIVET
25	52	52	CR3212-4-04	RIVET
26	2	2	MS27039-1-08	SCREW
27	1	1	MS27039-4-06	SCREW

NOTES

- 1) MATERIAL: N/A
- 2) FINISH: -CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
-POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) BLACK ANTI-SKID PAINT AS INDICATED TO 0.5 ABOVE LOCATION RIDGE PER DART QSI 005 4.4
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) UNITS: INCHES UNLESS OTHERWISE NOTED
- 6) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 7) IDENTIFICATION: NONE
- 8) WEIGHT: 12.5 lb
- 9) WELD PER DART QSI 004
- 10) BENDING: DAMAGE TOLERANCE ON FWD BEND:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 5 INCHES ABOVE THE GROUND. IT IS ACCEPTABLE TO POLISH OUT GOUGES UP TO 0.020 DEEP IN THE BENT PORTION OF THE TUBE. A MAXIMUM REDUCTION IN DIAMETER OF 0.150" IS ACCEPTABLE IN THE BENT PORTION OF THE TUBE.
- 11) BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/-291 ADHESIVE PER DART QSI 015
- 12) INSERT D2651-1 PLUG C/W D2651-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE)

WORK ORDER
NO. 78643 M.C.J.

12/01/12

RELEASED
09.07.07

per ECN 09-536

A	NEW ISSUE	MB	08.07.07
REV.	DESCRIPTION	BY	DATE
DESIGN	91		
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	08.07.07		

DART AEROSPACE USA, INC PORT HADLOCK, WA	
DRAWING NO. D3804	REV. A SHEET 1 OF 5
TITLE SKIDTUBE ASSEMBLY, 206A/B	SCALE NTS
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W/O:		WORK ORDER CHANGES					
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

RELEASED
4 09.03.03



DESIGN	97	DART AEROSPACE USA, INC	
DRAWN	J	PORT HADLOCK, WA	
CHECKED	J	DRAWING NO.	REV. A
MFG. APPR.	E	D3804	SHEET 2 OF 5
APPROVED	J	TITLE	SCALE
DE APPR.	J	SKIDTOE ASSEMBLY, 206A/B	NTS
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

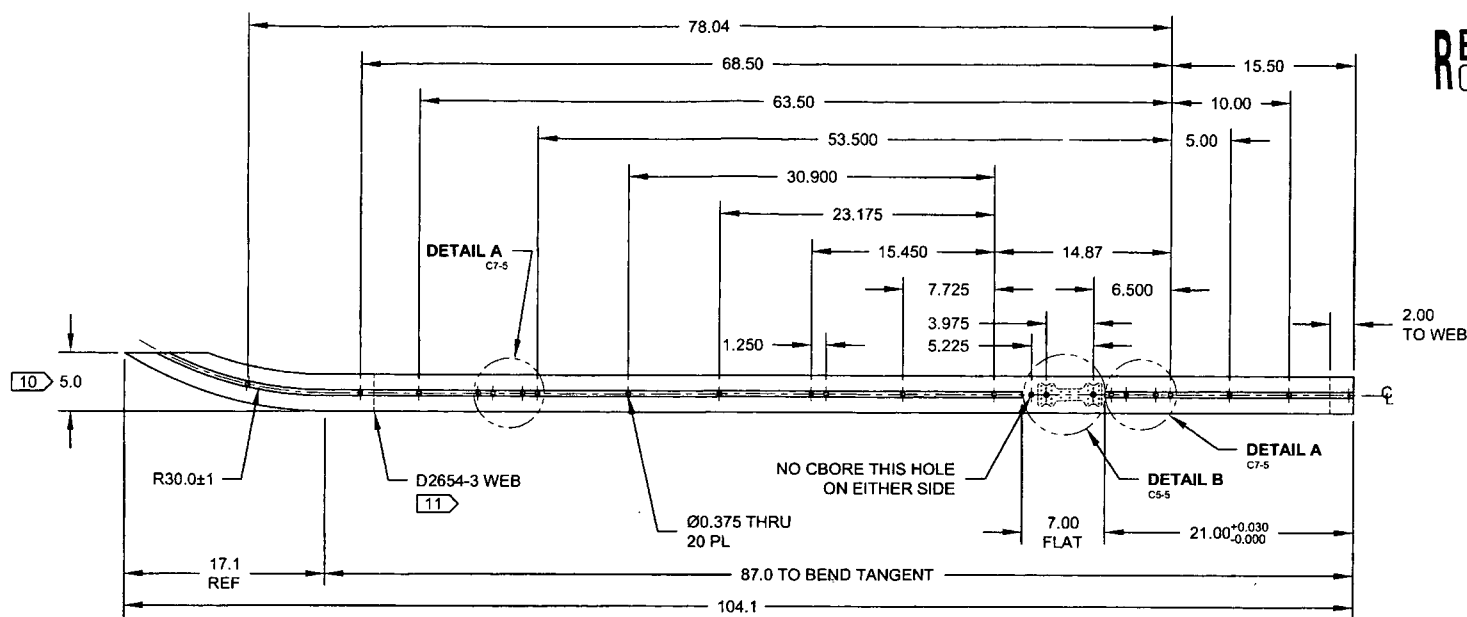
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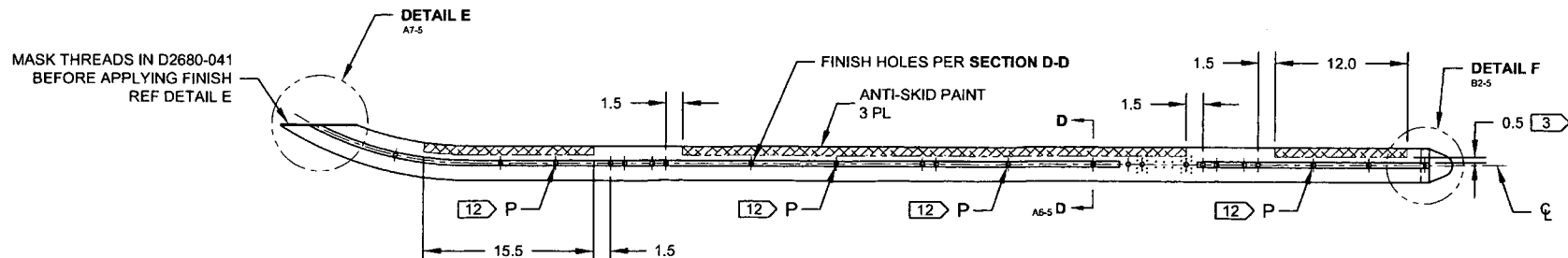
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78643

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(09-03-03)



D3804-043 BENDING/DRILLING DETAIL



D3804-043 ASSEMBLY/FINISHING DETAIL

DESIGN	97	DART AEROSPACE USA, INC	
DRAWN	97	PORT HADLOCK, WA	
CHECKED	97	DRAWING NO.	REV. A
MFG. APPR.	97	D3804	SHEET 3 OF 5
APPROVED	97	TITLE	SCALE
DE APPR.	97	SKIDTUBE ASSEMBLY, 206A/B	NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

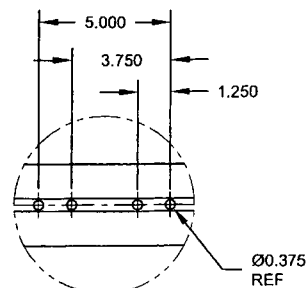
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

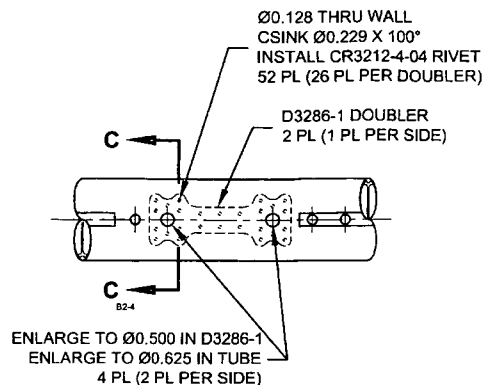
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
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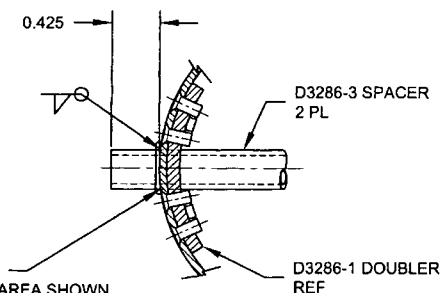
78643

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UP 09.03.07

DETAIL A D6-2
C2-2
D6-3
C2-3
SCALE NONE

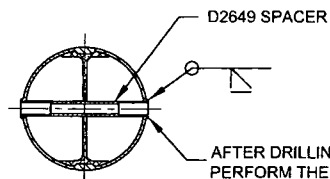


DETAIL B C3-2
C3-3
SCALE NONE



- TO INSTALL D3286-1/3:
1. GRIND OFF FLANGE IN AREA SHOWN, FLUSH WITH OUTSIDE SURFACE OF ROUND TUBE
 2. LOCATE & DRILL D3286-1 DOUBLER USING DT3286-1T1
 3. ENLARGE HOLES IN D3286-1 TO Ø0.500
 4. ENLARGE HOLES IN TUBE TO Ø0.625 AND CHAMFER HOLE 0.03 X 45°
 5. RIVET D3286-1 TO TUBE
 6. INSERT D3286-3 SPACER
 7. WELD IN PLACE AND GRIND FLUSH

SECTION C-C C6-4
PARTIAL SECTION
SCALE NONE



SECTION D-D A4-2
A4-3
FOR Ø0.375 HOLES ONLY
SCALE NONE

- AFTER DRILLING AND BENDING ASSEMBLY PERFORM THE FOLLOWING FOR Ø0.375 HOLES ONLY:
1. CHAMFER HOLE 0.03 X 45°
 2. INSERT D2649 SPACER
 3. WELD INTO PLACE AND GRIND FLUSH
 4. CBORE TO Ø0.313 X 0.75 DP (EXCEPT WHERE INDICATED)

DESIGN	99	DART AEROSPACE USA, INC	
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CHECKED	J	DRAWING NO.	REV. A
MFG. APPR.	E	D3804	SHEET 4 OF 5
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

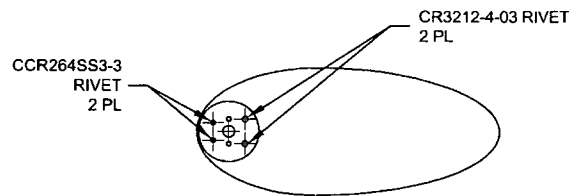
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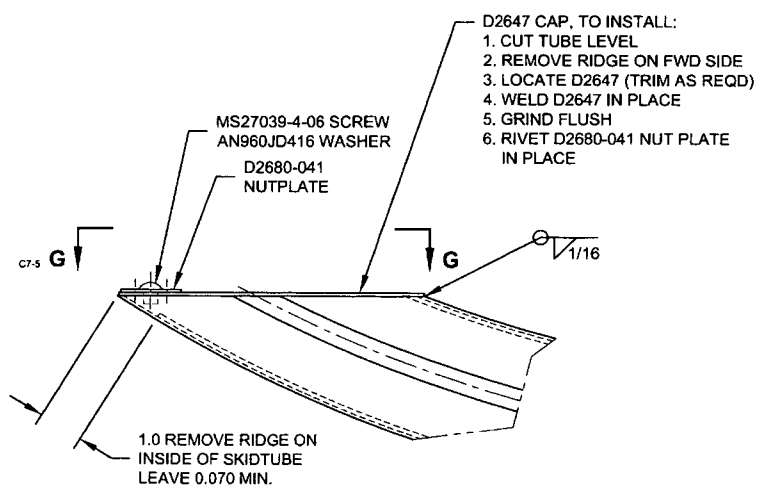
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78043

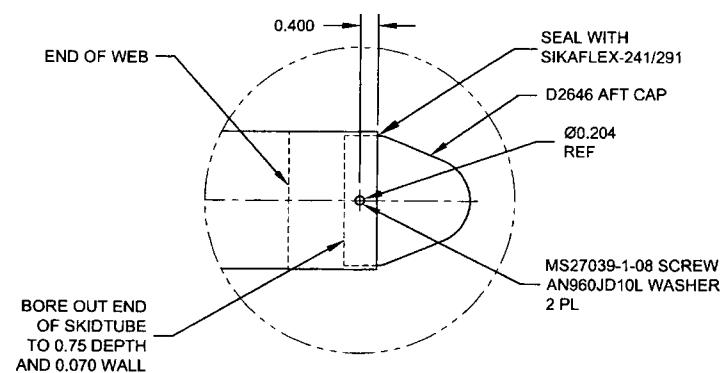
RELEASED
09 03 07



VIEW G-G
SCALE NONE A7-5



DETAIL E
SCALE NONE B7-2 B7-3



DETAIL F
SCALE NONE B2-2 B2-3

DESIGN	78043	DART AEROSPACE USA, INC	
DRAWN	J	PORT HADLOCK, WA	
CHECKED	J	DRAWING NO.	REV. A
MFG. APPR.	J	D3804	SHEET 5 OF 5
APPROVED	J	TITLE	SCALE
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

NO. 281

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliot
Job number: 77988
Part number: A206-642-151
Description: Skid plate
Welding Process: Tig[☒] Mig[]
Base material: Aluminum
Current: AC[☒] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[]
Penetration: pass[☒] fail[]

UNACCEPTABLE

Cracks: pass[☒] fail[]
Undercut: pass[] fail[]
Pin holes: pass[☒] fail[]
Overlap (cold lap): pass[☒] fail[]
Porosity (surface): pass[☒] fail[]
Coloration: pass[☒] fail[]

Qualifier [Signature] Date of Test Coupon 12-01-23
Welder Barclay Elliot Date of Test Coupon 12-01-23

The above named individual is qualified in accordance with AWS D17.1.2001 to weld